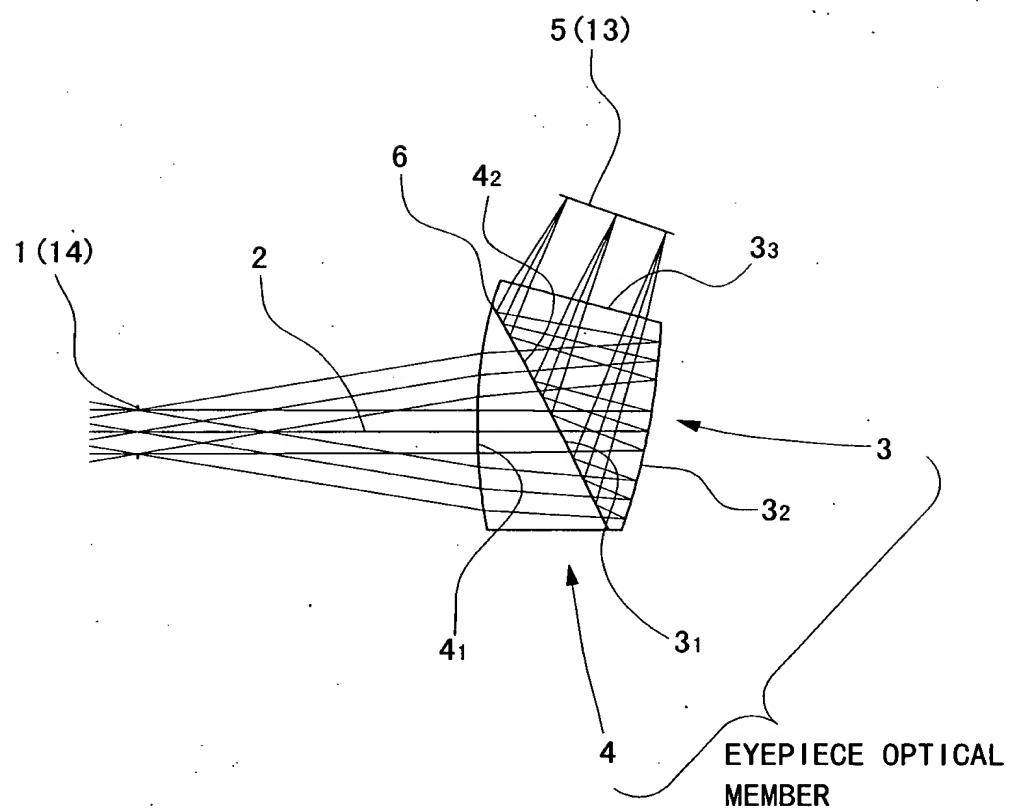


FIG.1

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FIG.2

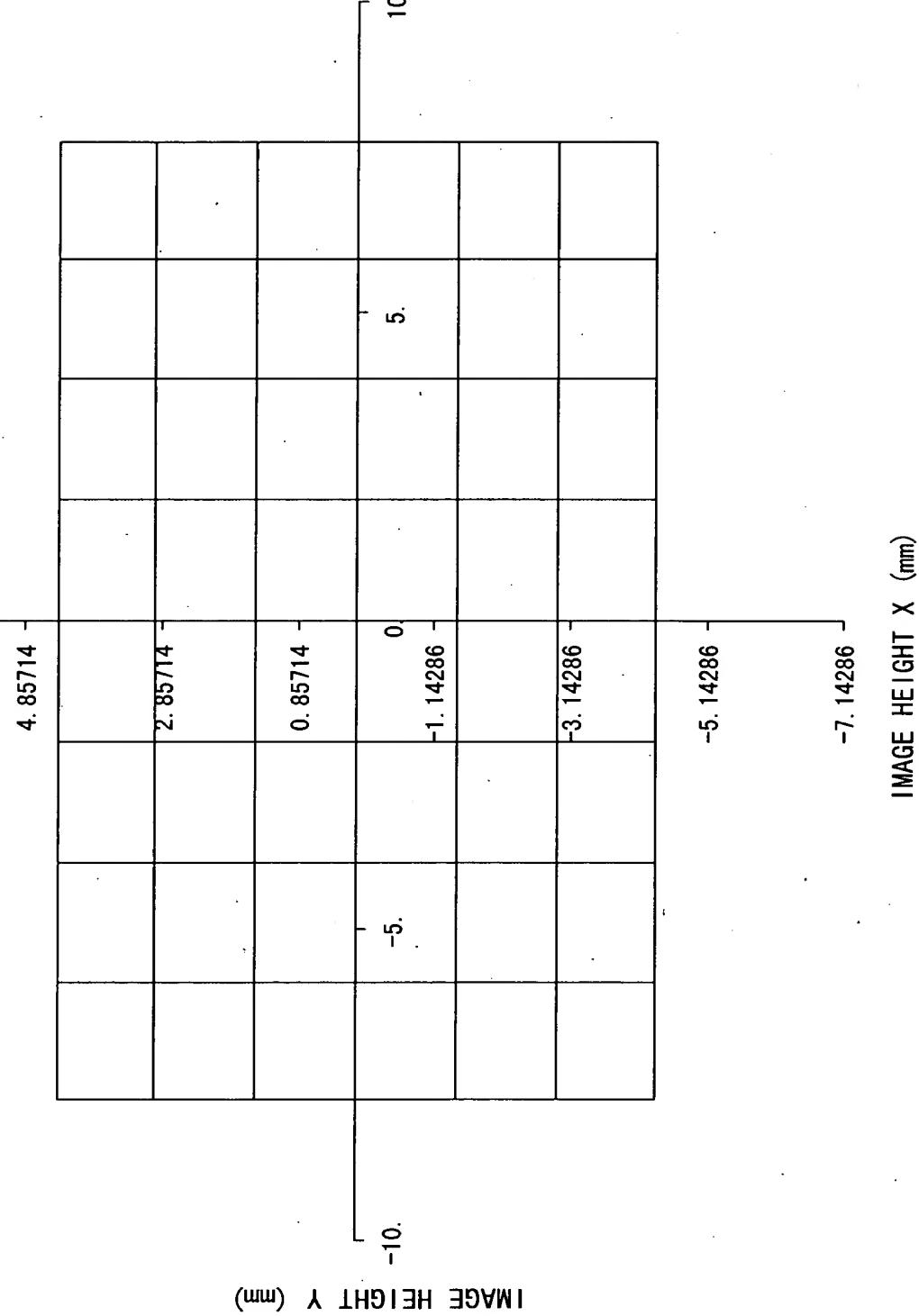
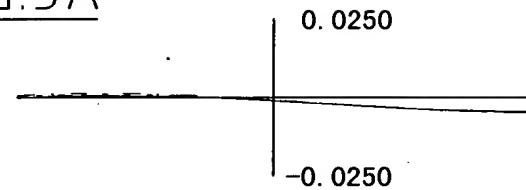
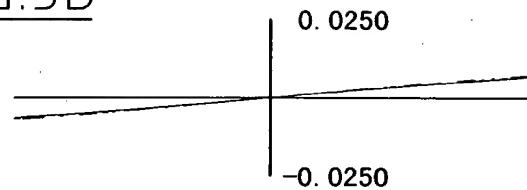
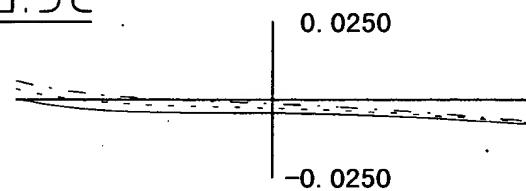
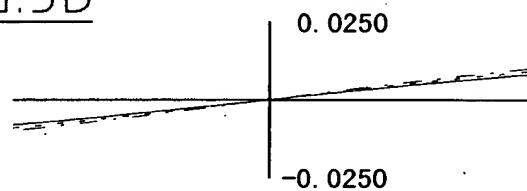
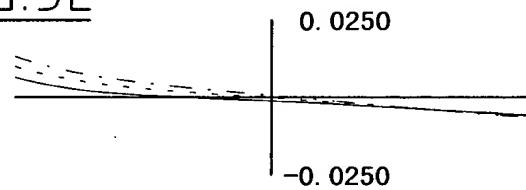
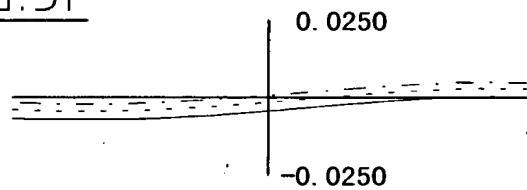
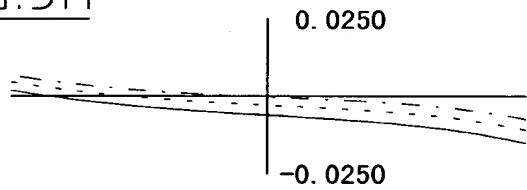
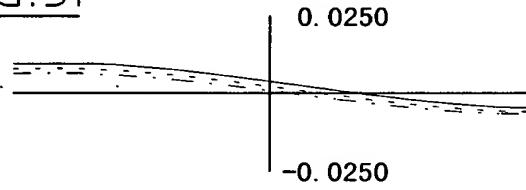
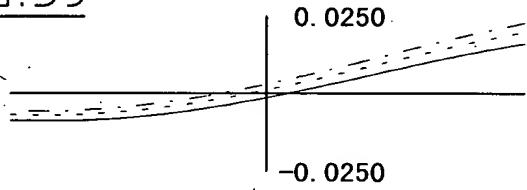
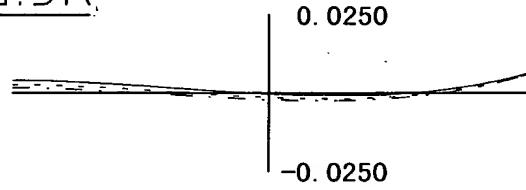
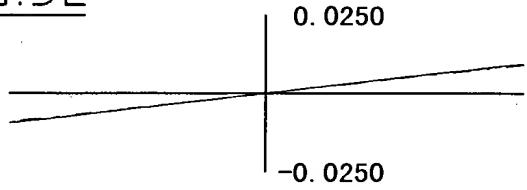


FIG.3AFIG.3BFIG.3CFIG.3DFIG.3EFIG.3FFIG.3GFIG.3HFIG.3IFIG.3JFIG.3KFIG.3L

650.0 NM

630.0 NM

610.0 NM

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FIG.4A



FIG.4B

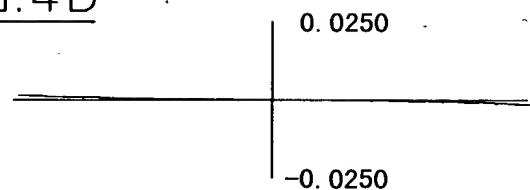


FIG.4C

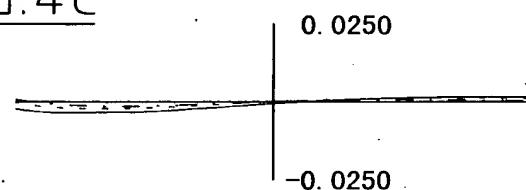


FIG.4D

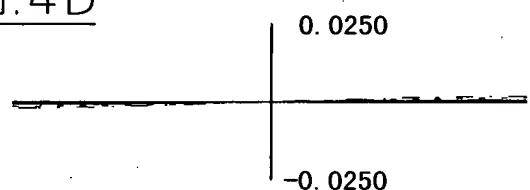


FIG.4E



FIG.4F



FIG.4G

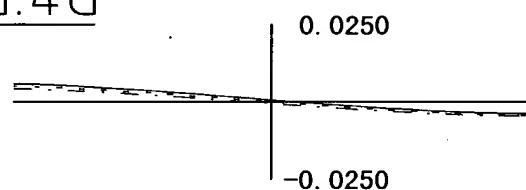


FIG.4H

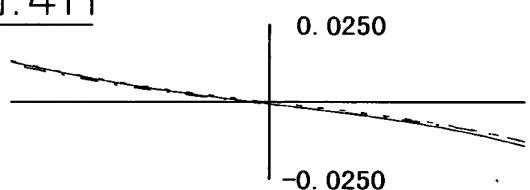


FIG.4I

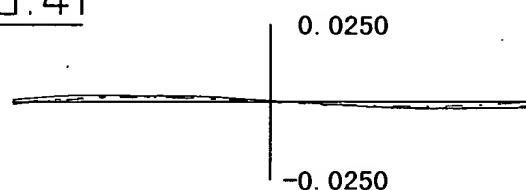


FIG.4J

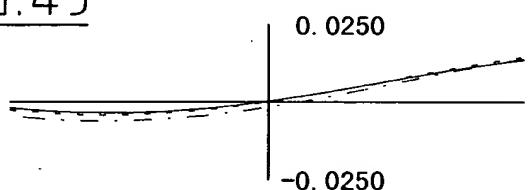


FIG.4K

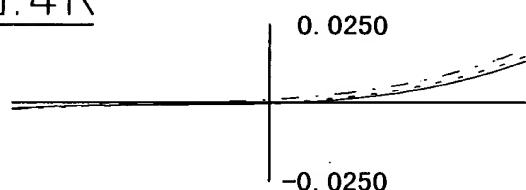
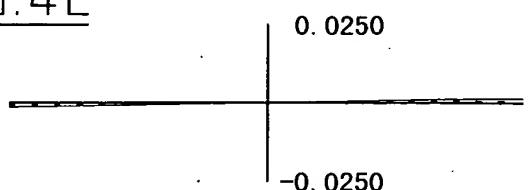


FIG.4L

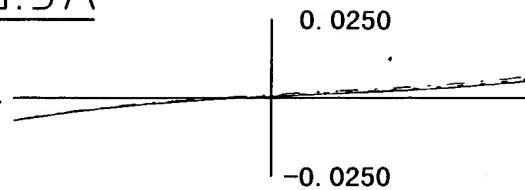
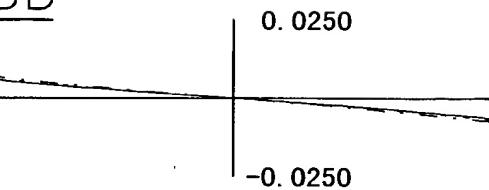
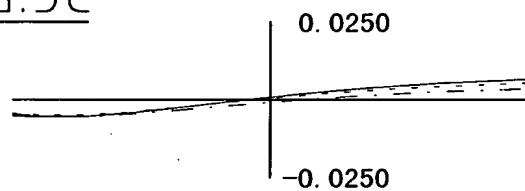
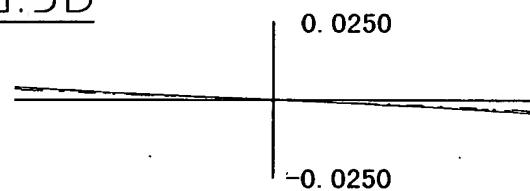
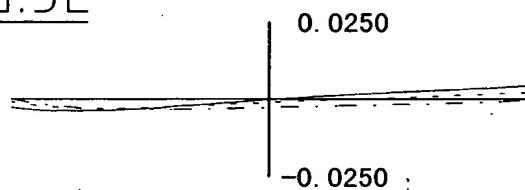
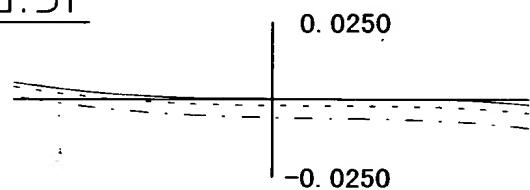
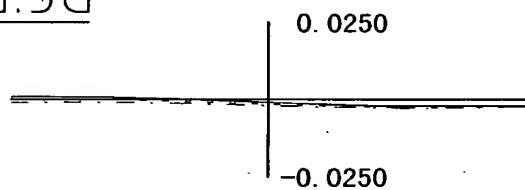
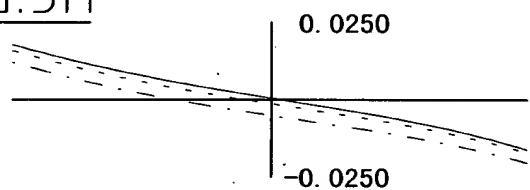
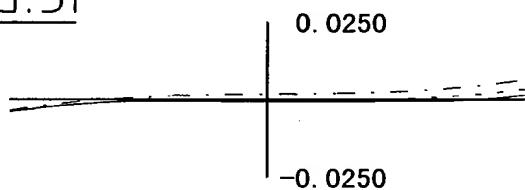
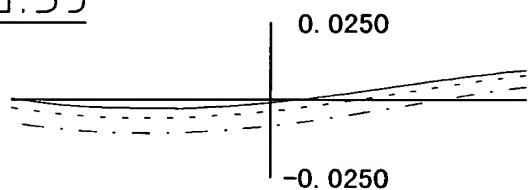
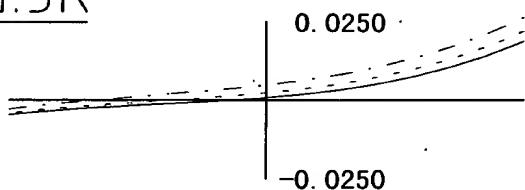
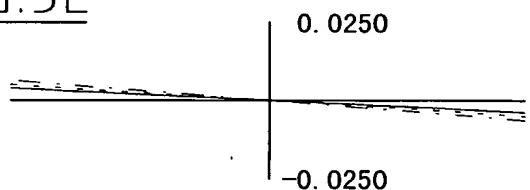


— 540.0 NM

- - - 520.0 NM

— · — 500.0 NM

LATERAL ABERRATIONS IN G BAND

FIG.5AFIG.5BFIG.5CFIG.5DFIG.5EFIG.5FFIG.5GFIG.5HFIG.5IFIG.5JFIG.5KFIG.5L

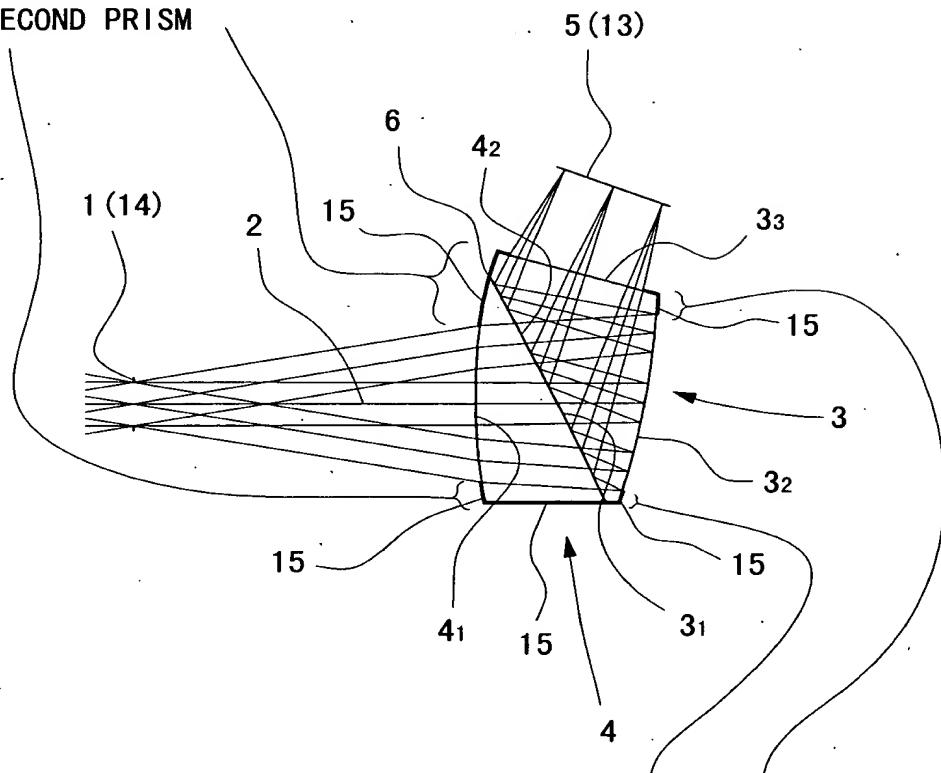
490.0 NM

470.0 NM

450.0 NM

FIG.6

OPTICALLY NON-OPERATIVE FACES  
OUTSIDE OPTICALLY EFFECTIVE DIAMETER  
ON SECOND EXIT SURFACE  
OF SECOND PRISM



OPTICALLY NON-OPERATIVE FACES  
OUTSIDE OPTICALLY EFFECTIVE  
DIAMETER ON REFLECTING SURFACE  
OF FIRST PRISM

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FIG. 7

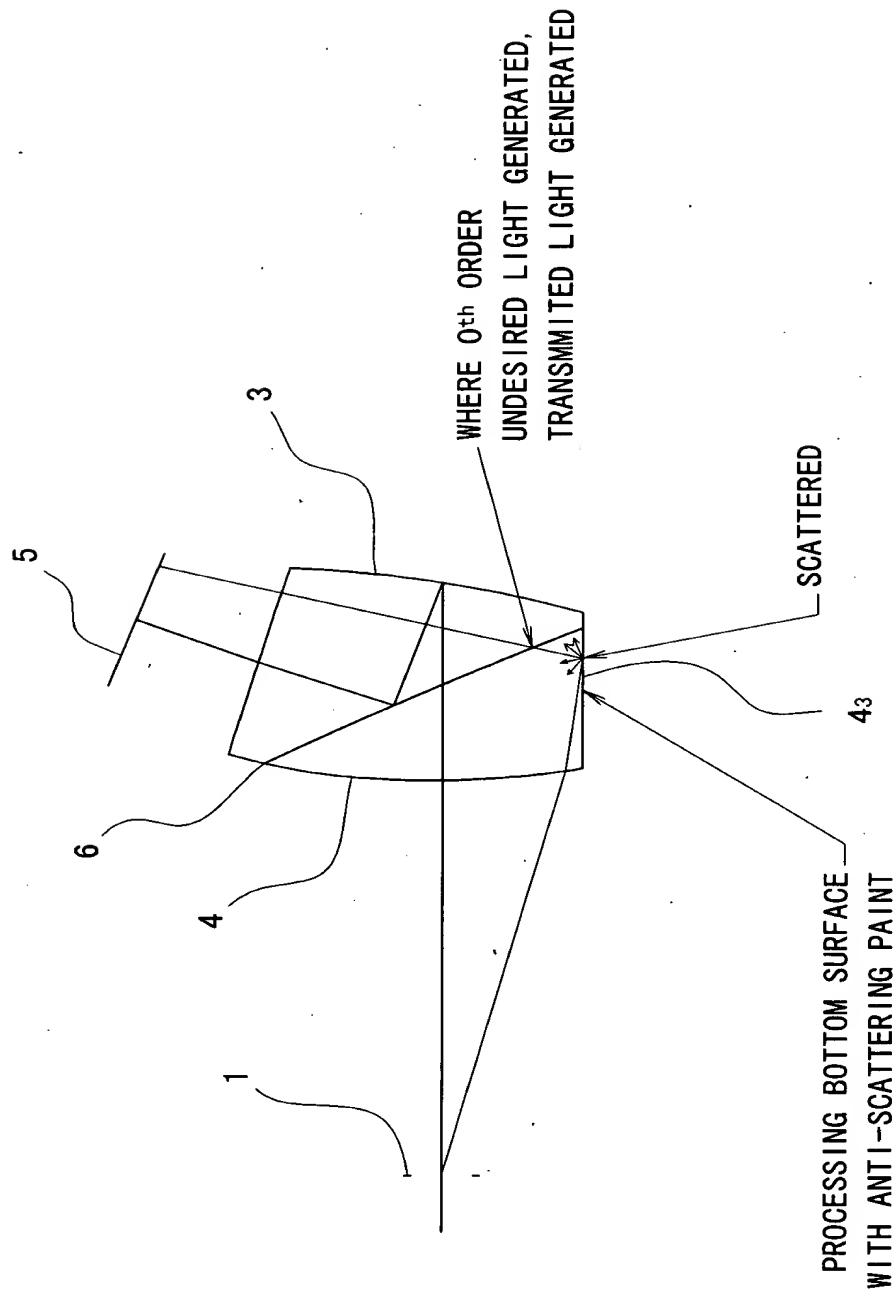


FIG. 8

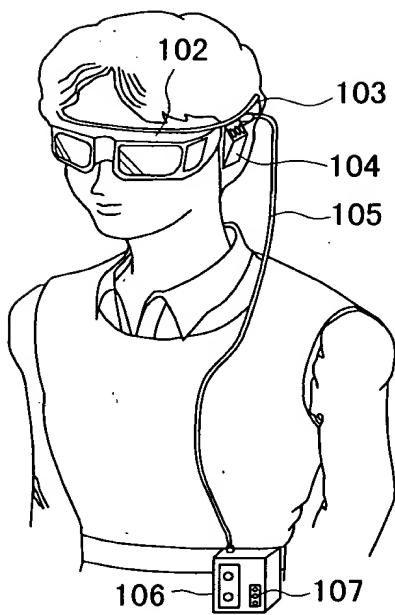


FIG. 9

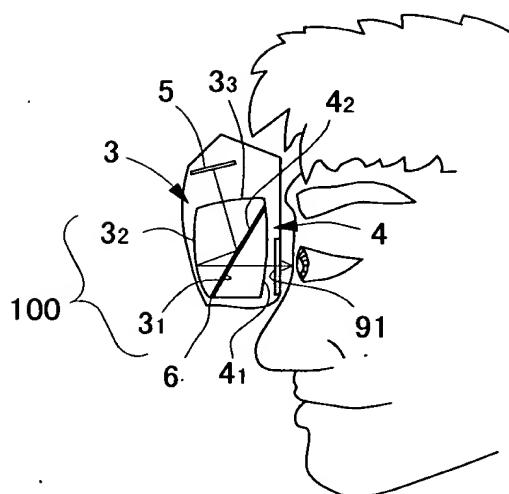
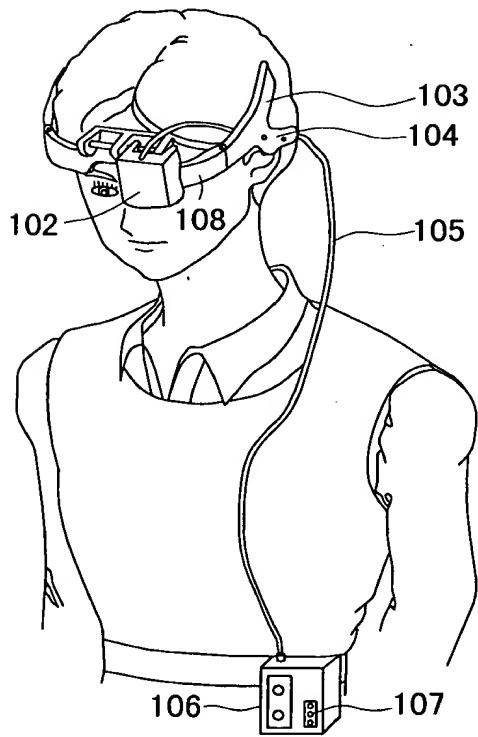


FIG. 10



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FIG:11

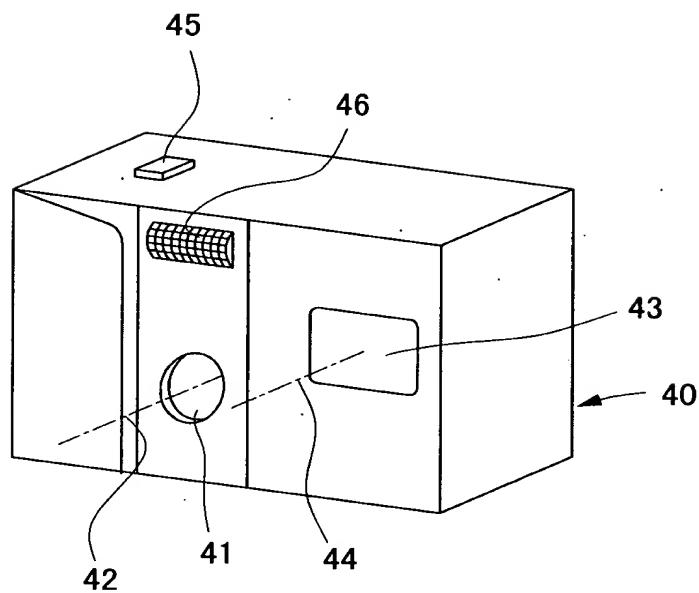
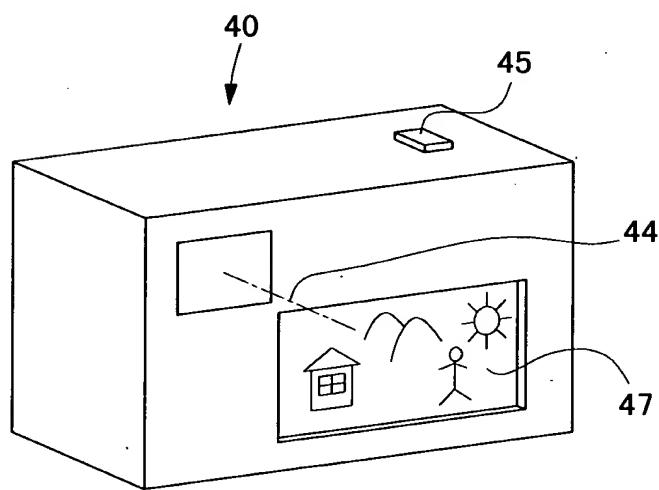


FIG.12



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FIG.13

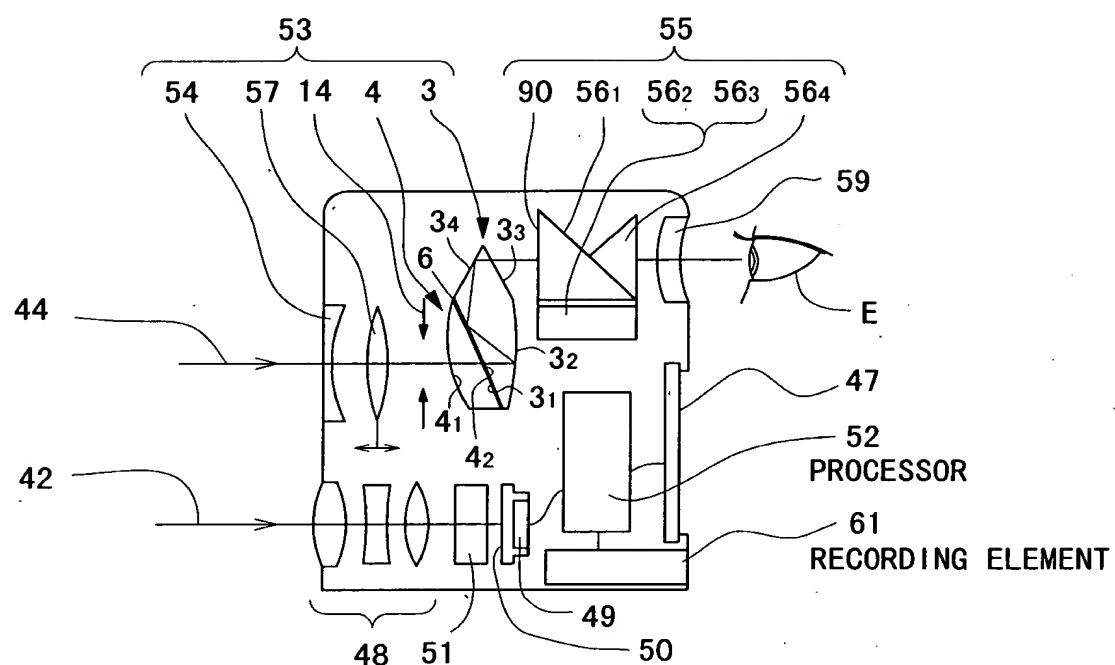
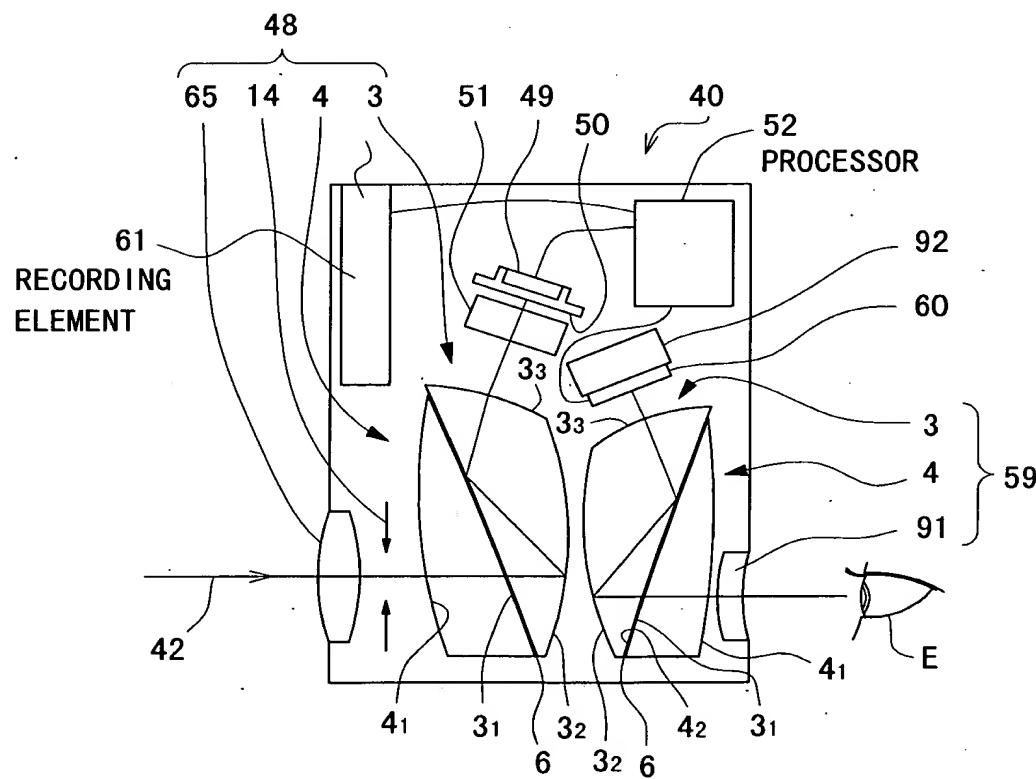


FIG.14



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FIG.15A

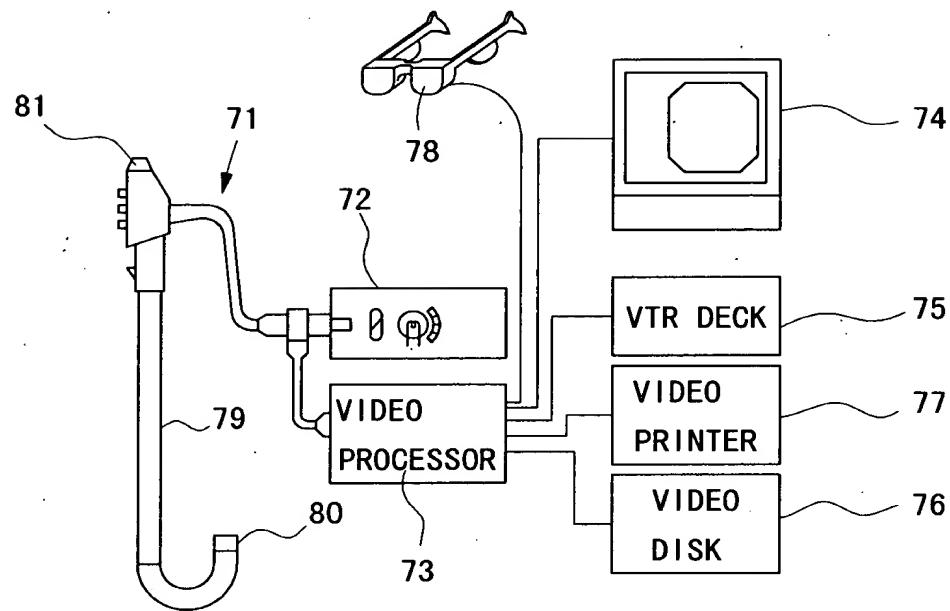


FIG.15B

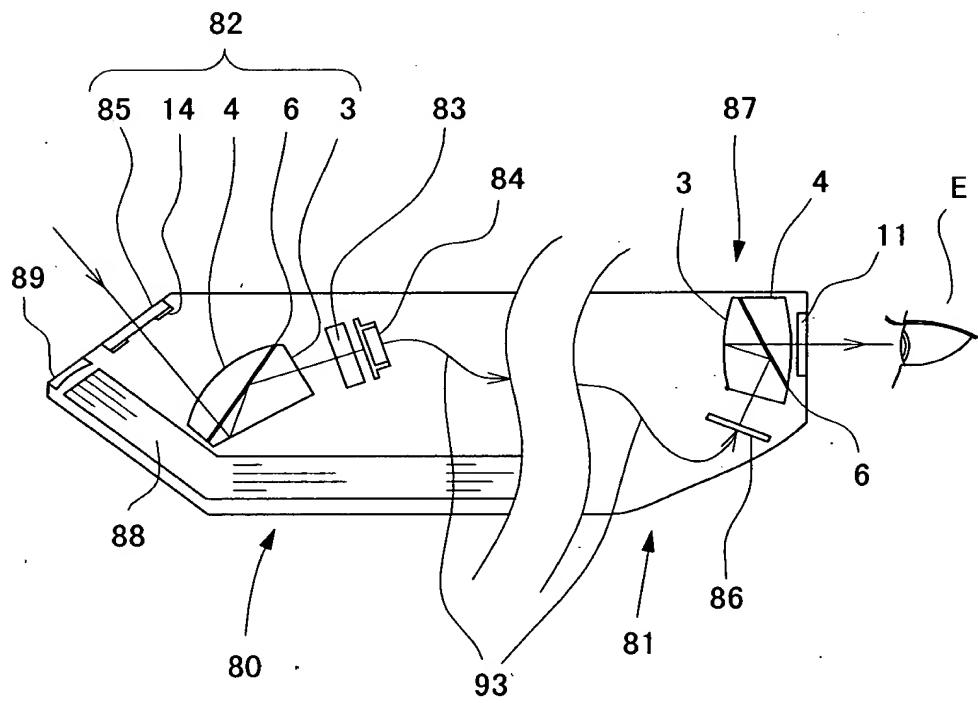


FIG. 16

1<sup>st</sup>-2<sup>nd</sup> SURFACE, 2<sup>nd</sup>-1<sup>st</sup> SURFACE,  
HOLOGRAM ELEMENT SURFACE

2<sup>nd</sup>-2<sup>nd</sup> SURFACE

D (PLANE OF SYMMETRY OF  
PLANE-SYMMETRIC FREE CURVED SURFACE)

P2 (DECENTERED PRISM)

P1 (DECENTERED PRISM)

1<sup>st</sup>-1<sup>st</sup> SURFACE

ONLY PLANE OF SYMMETRY OF  
FREE CURVED 1<sup>st</sup>-1<sup>st</sup> SURFACE

C (IMAGE SURFACE; DISPLAY SURFACE OF  
OBSERVATION IMAGE FORMING MEMBER OR  
IMAGE PICKUP SURFACE OF IMAGE  
PICKUP ELEMENT)

1<sup>st</sup>-3<sup>rd</sup> SURFACE

ONLY PLANE OF SYMMETRY OF  
FREE CURVED 2<sup>nd</sup>-2<sup>nd</sup> SURFACE

PLANE OF SYMMETRY OF POWER OF HOE  
(ONLY PLANE OF SYMMETRY OF  
1<sup>st</sup>-2<sup>nd</sup> SURFACE, 2<sup>nd</sup>-1<sup>st</sup> SURFACE)

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FIG.17A

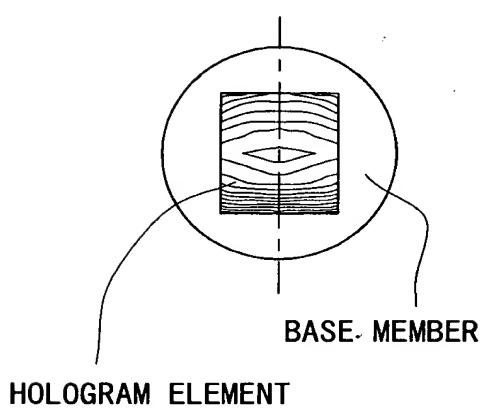


FIG.17B

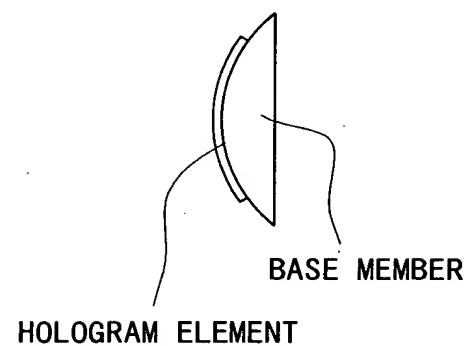
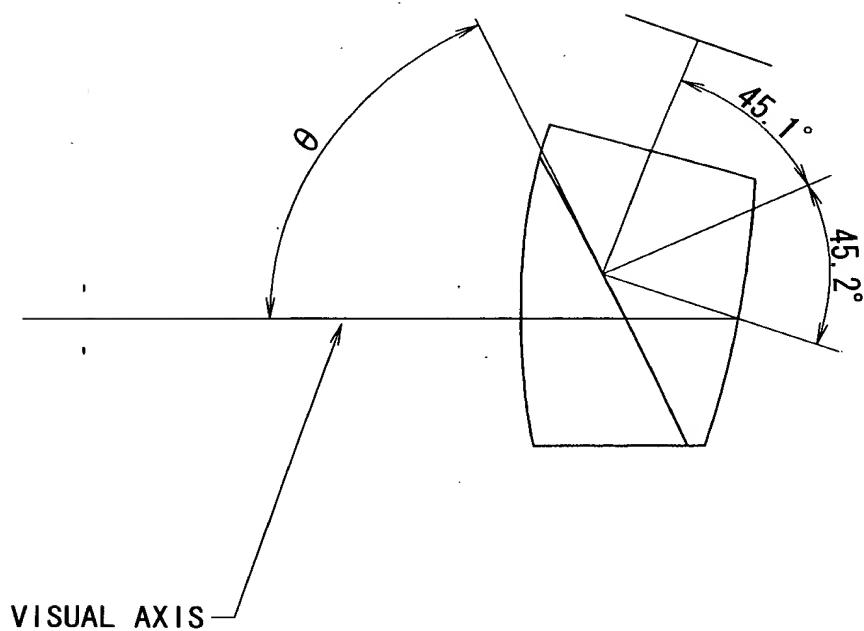


FIG.18



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FIG.19

(EXAMPLE) WHERE MEDIUM IS AIR WITH  $n=1$ :

$$\Phi_0^{2P} = -r_2 - r_1 < 0$$

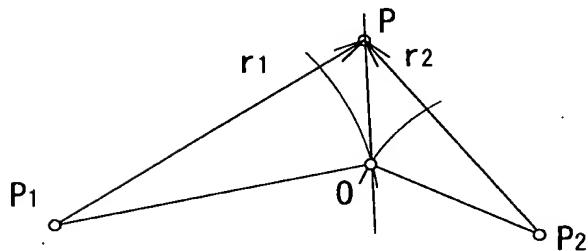
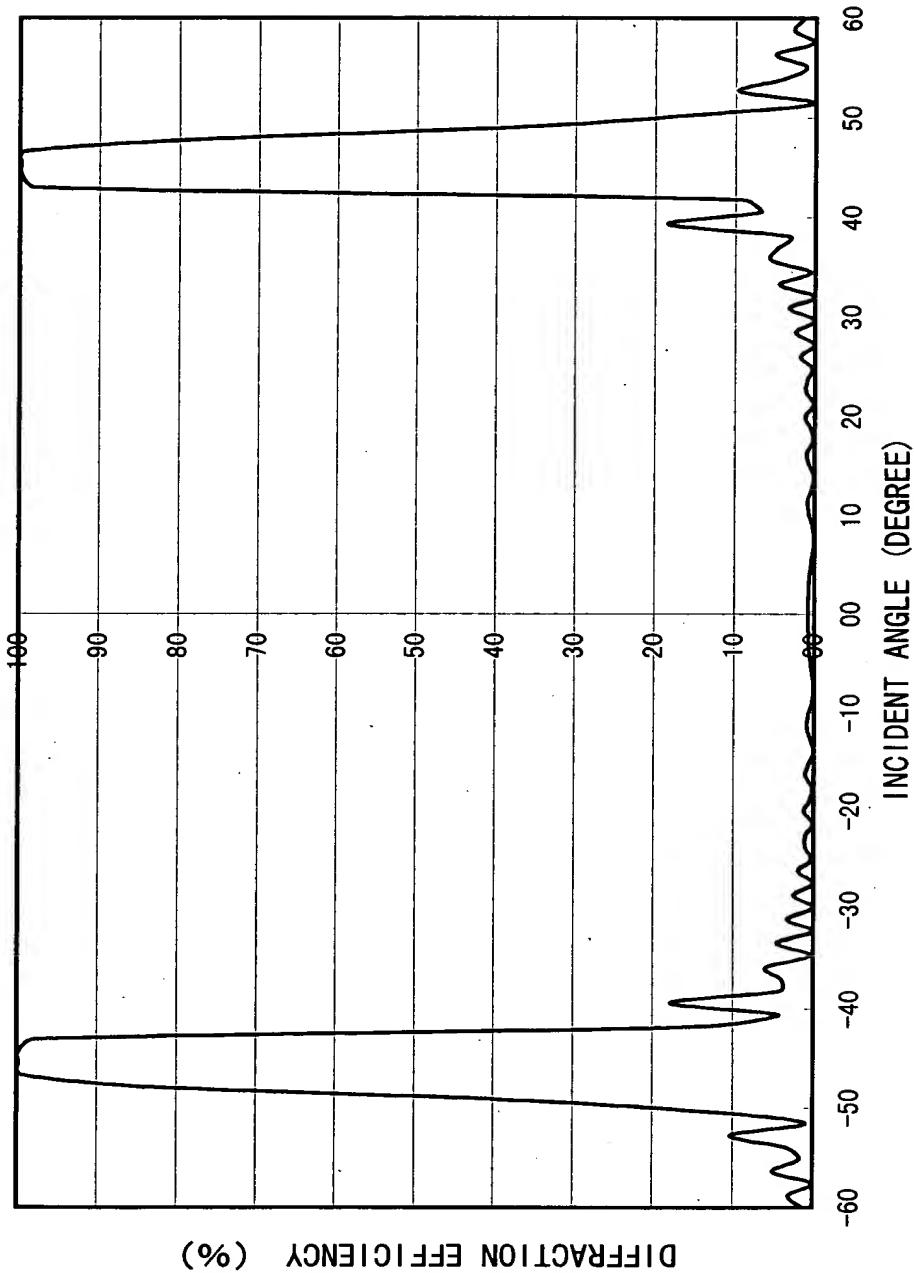
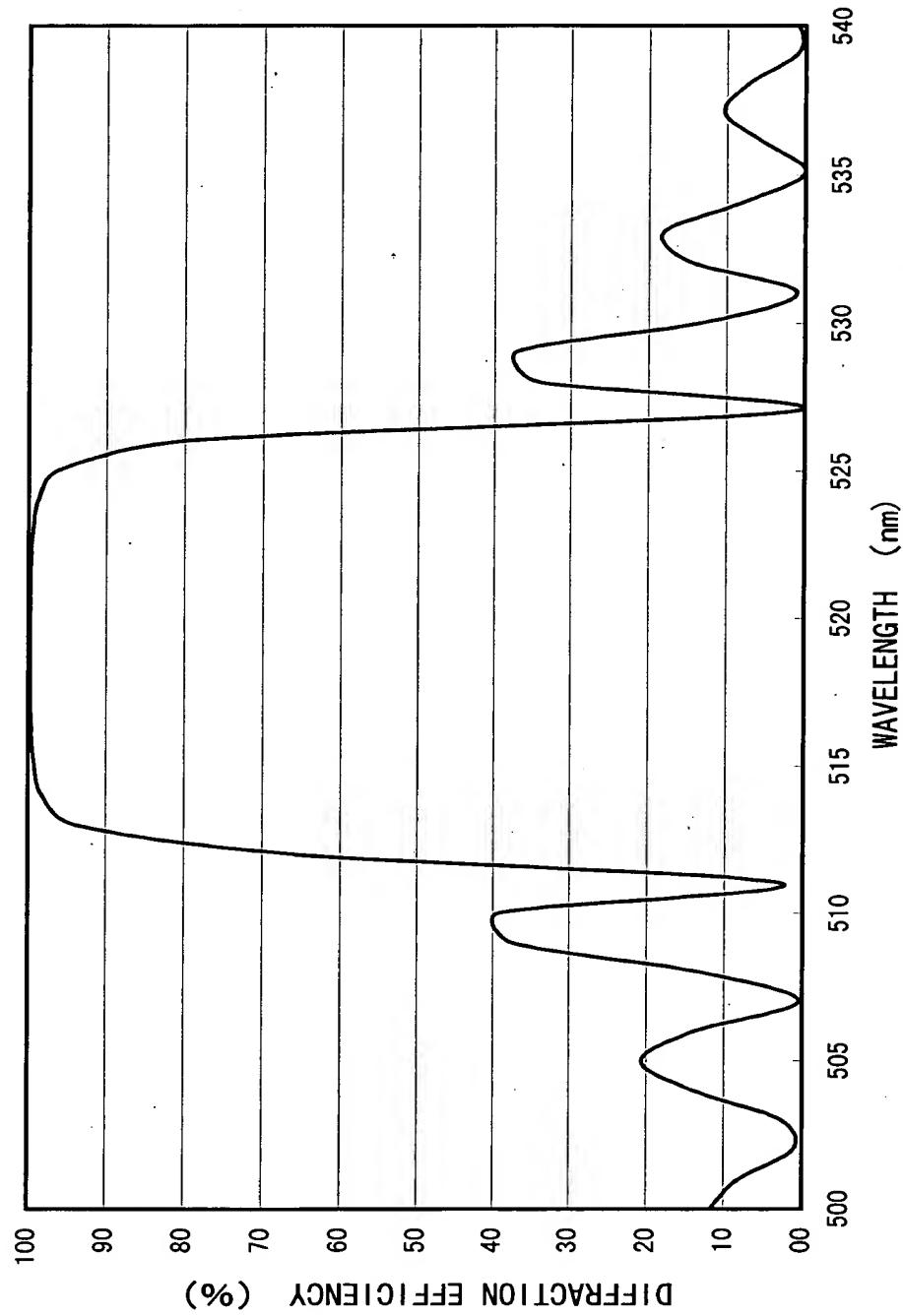


FIG. 20

INCIDENT ANGLE vs DIFFRACTION EFFICIENCY  
(WAVELENGTH=520nm)

FIG. 21

WAVELENGTH vs DIFFRACTION EFFICIENCY  
(INCIDENT ANGLE = 45.1 DEGREE)